"DRAFT"

HARCO PROPERTY SITE
SAMPLING QUALITY ASSURANCE/ QUALITY CONTROL PLAN
WILTON, CONNECTICUT

(Site Investigation for 1/28/92)

January 1992

Prepared For:

U.S. Environmental Protection Agency
Region I
60 Westview Street
Lexington, MA 02173

Prepared By:

ROY F. WESTON, INC.
Technical Assistance Team
Region I

EPA Site ID No. L-4
Contractor Work Order No. 6300-11-01-1638
TDD No. 01-9201-01
EPA Contract No. 68-W0-0036
TAT Document No. 01-N-00991

Approvals

Roy F. Weston, Inc.

EPA

Paul Killian Task Leader	Date	Paul Groulx On-Scene Coordinator	Date
Mark McDuffee Project Manager	Date		

"DRAFT"

TABLE OF CONTENTS

"DRAFT"

LIST OF FIGURES

PAGE

"DRAFT"

LIST OF TABLES

PAGE

"DRAFT"

1.0 Background

The suspected contamination at the Harco Property site is a result of landfilling of metal hydroxide sludge and the following information is known about the site. The site is located on Old Mill Road in the city of Wilton, Fairfield County, Connecticut. The nearest residents are located within 0.1 miles north of the site. The Norwalk River is located 0.25 miles due west of the site. (see Figure 1 - Site Location Map).

The site is a landfill facility on 41.1 acres which had been operating for an unknown number of years and was abandoned in 1982. The types of material handled by this facility were metal hydroxide sludge from the Gilbert and Bennett, Inc. facility located in Georgetown, CT. The volume of metal hydroxide sludge permitted by the town of Wilton and the state of Connecticut, Water Resources Division, in 1970 for disposal was limited to 800 cubic yards, however it was reported by the town of Wilton Department of Environmental Health in January 1986 (Wilton DEH, 1986) that the actual disposal exceeded the permit length of time. The actual amount of material disposed at the Harco Property site may have exceeded the above permit and the actual amounts are unknown. Additional areas and materials may have also been landfilled.

The primary contaminant is lead at concentrations up to 84,500 parts per million (ppm) identified during the EPA Removal Program Preliminary Assessment/Site Investigation (PA/SI) conducted on September 25, 1990 (Weston, 1990). A site diagram including the previous sample stations and analytical results is shown in Figure 2. The basis of this information may be found in background files maintained by the EPA On-Scene Coordinator.

2.0 Data Use Objectives

The objective of the sampling survey is to obtain sufficient analytical data from a representative number of samples which can be used to determine the extent of contamination for further removal actions at the site by the U.S. EPA, Region I, Emergency Planning and Response Branch (EPRB).

This sampling event is to determine the presence of contamination in surface water and to determine the extent of contamination in on-site soils for the purpose of site characterization and preliminary health risk assessment. The data will be evaluated against the EPA established cleanup levels of 500 - 1000 ppm for lead in soil at Superfund Sites (OSWER 1990) for the purpose of conducting response activities.

3.0 Quality Assurance Objectives

The quality assurance (QA) objectives for the on-site screening activities will be QA1. These activities include the use of the following instrumentation/test equipment:

MIE, Inc. Model PDM-3 Personal Aerosol Monitor (Miniram)
Outokumpu XMET 880 X-Ray Fluorescence (XRF) Analyzer (XMET)

"DRAFT"

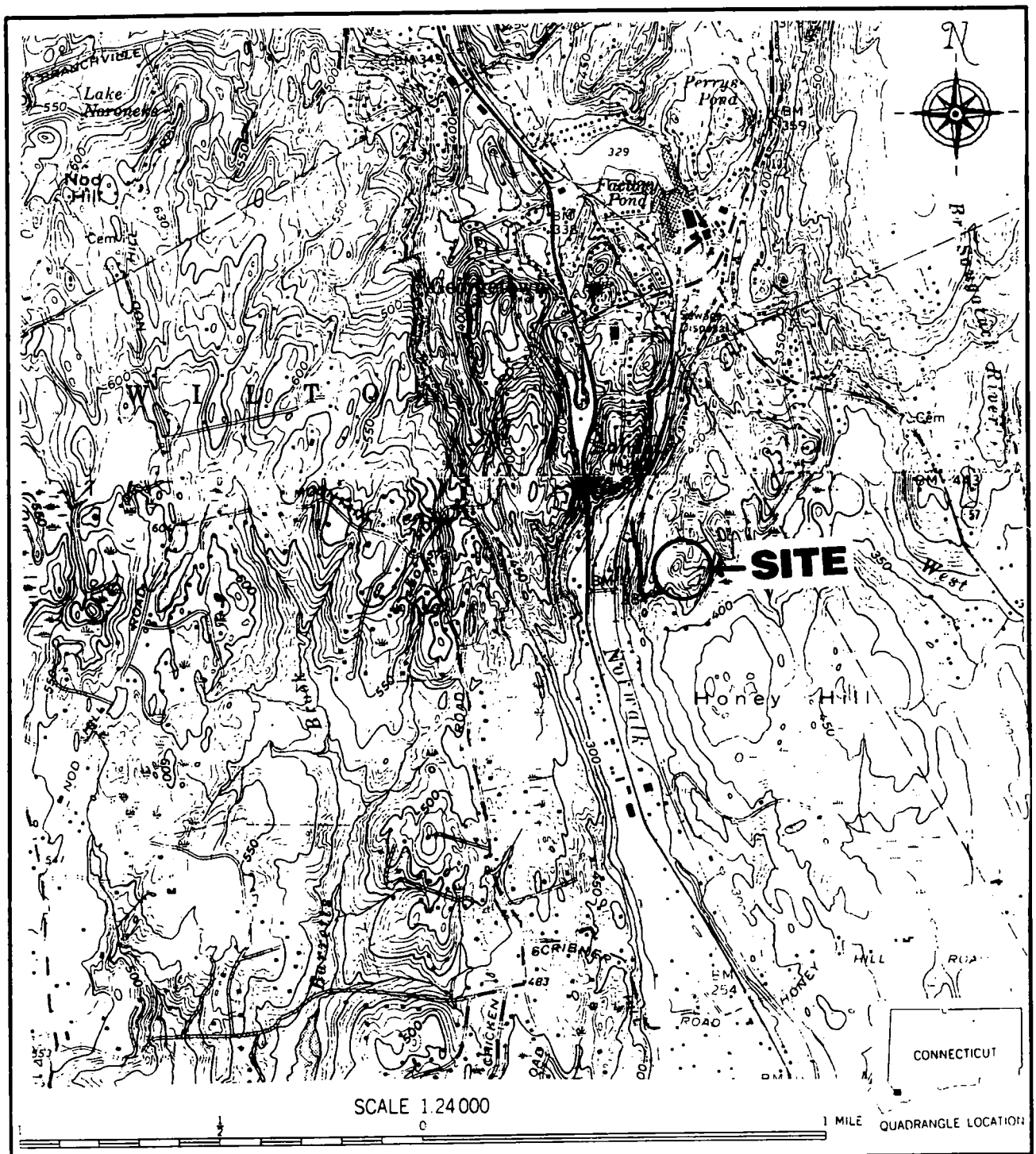

FIGURE 1
Site Location Map
HARCO PROPERTY
Wilton, Connecticut

Norwalk North, CT and Bethel, CT Quadrangles
USGS 7.5 Series, Topographic Maps
Norwalk North, CT Quadrangle Photorevised 1971
Bethel, CT Quadrangle Photorevised 1984

WESTON
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN	DATE	PCS #
Paul F. Killian	01/92	1638
APPROVED	DATE	TDD #
TCJ	1/92	01-9201-01

The QA objectives are described in OSWER Directive 9360.4-01 (April 1990-Interim Final), *Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan and Data Validation Procedures* (OSWER 1990)

As identified in Sections 1.0 and 2.0, the objective of this sampling event applies to the following parameters:

QA Level	Parameters(Method)	Matrix	Intended Use Of Data
QA1	Lead (XMET)	Soil	Field Screening
QA2	Lead (XRF/ICP)	Soil	Site Characterization
QA2	Lead (ICP)[1]	Surface Water	Site Characterization/ Risk Assessment

1 - Inductively Coupled Plasma (ICP)

The QA objectives for the samples analyzed at the laboratory will be a modified QA2. It is anticipated that QA1 and QA2 will satisfy most data quality requirements for the Removal Program. QA3 is expected to be used only in those cases where an error determination is needed to identify false negative or false positive values for critical decision level concentrations.

See Section 6.0 for quality assurance requirements.

4.0 Approach and Sampling Methodologies

The sampling survey will be conducted on or about January 27, 1992. Samples have been identified using an EPA internal classification of low, mid, and high-level concentrations, which refers to the anticipated level of potential contamination. This classification system was instituted by EPRB and the U.S. EPA New England Regional Laboratory (NERL) in May 1991. The classification system and relative sampling protocols used to develop this sampling plan are described in a Roy F. Weston, Inc. draft inter-office memorandum dated June 6, 1991 (Weston, 1991), which has been submitted for comment to EPRB and NERL.

4.1 Sampling Equipment

The following equipment will be utilized to obtain environmental samples from the respective media/matrix:

Parameter/Matrix	Sampling Equipment	Fabrication	Dedicated
Lead in Soil (surface)	Spatula	plastic	Yes
Lead in Soil (depth)	Thin-Walled Tube Sampler	stainless steel	No
Lead in Surface Water	Sample Bottle	polyethylene	Yes

Decontamination Steps for non-dedicated equipment:

1. Physical removal
2. Non-phosphate detergent wash
3. 10% Nitric Acid Solution
4 Distilled/deionized water rinse
5. Air dry

4.2 Sampling Design

The proposed sampling design is depicted on the attached Sample Location Map (Figure 3) and is based on the following rationale. Sample stations will be located on a 25-foot grid system centered on the area of highest lead contamination as identified during the EPA PA/SI conducted in September 1990. The grid system will be set up using both a north/south and east/west baseline that will be measured from permanent landmarks for future relocation. A survey instrument will be used to set the baselines and additional sample stations will be measured using a fiberglass tape measure and a compass.

The Outokumpu XMET 880 portable XRF analyzer will be used to conduct the initial screening of each sample location. XRF analysis is based on recording the specific fluorescent X-rays given off by a sample after the sample has been exposed or excited by a radioactive source. Specific elements, in this case lead, will produce a characteristic fluorescent X-ray spectrum that can be semi-quantified by comparison to reference samples through an internal calibration model. The XMET 880 will be calibrated in accordance with the XMET 880 Operations Manual prepared by the Region IV TAT (Weston TAT 1991).

The objective of the field XRF screening is to define the area on site where the lead concentrations in surface soil are significantly higher then the EPA established cleanup levels of 500-1000 ppm. The boundary defined by the field XRF screening will then be sampled for more precise laboratory analysis. Laboratory analysis will include XRF analysis using the Kevex 7000 analyzer with confirmation analysis using ICP Method 200.7 CLP-M. Additional samples will be collected from beneath the surface for XRF field screening and laboratory analysis in attempts to characterize the vertical extent of lead contamination.

The EPA New England Regional Laboratory has allotted seven sample slots for ICP analysis. To meet the QA2 objective requirements, with the above limits on ICP analysis, up to 25 samples will be collected for laboratory XRF on the Kevex analyzer. The majority of the laboratory XRF samples will be collected from the boundary of the contaminated area, but several samples will be collected from the contaminated areas identified by the field XRF screening for comparison.

4.3 Sample Documentation

All sample documents must be completed legibly, in black ink. Any corrections or revisions must be made by lining through the incorrect entry and by initiating the error.

Field Log Book

The field log book is essentially a descriptive notebook detailing site activities and observations so that an accurate account of field procedures can be reconstructed in the writer's absence. All entries should be dated and signed by the individuals making the entries, and should include (at a minimum) the following:

1. Site name and project number.
2. Name(s) of personnel on-site.
3. Dates and times of all entries (military time preferred).
4. Descriptions of all site activities, including site entry and exit times.
5. Noteworthy events and discussions.
6. Weather conditions.
7. Site observations.
8. Identification and description of samples and locations.
9. Subcontractor information and names of on-site personnel.
10. Date and time of sample collections, along with chain-of-custody information.
11. Record of photographs.
12. Site sketches.

Sample Labels

Sample labels must clearly identify the particular sample, and should include the following:

1. Site name and number.
2. Date/time sample was taken.
3. Sample preservation.
4. Initial of sampler(s).
5. Analysis requested.
6. Sample location/station.

Sample labels must be securely affixed to the sample container. Tie-on labels can be used if properly secured.

Chain of Custody Record

A chain of custody record must be maintained from the time the sample is taken to its final deposition. Every transfer of custody must be noted and signed for, and a copy of this record kept by each individual who has signed. When samples (or groups of samples) are not under direct control of the individual responsible for them, they must be stored in a locked container with a chain of custody seal.

The chain of custody record should include (at minimum) the following:

1. Project number (assigned by EPA NERL).
2. Project Name, City and State.
3. Name(s) and signature(s) of sampler(s).
4. Sample station designation.
5. Date and time of collection.
6. Sample type (composite or grab)
7. Station location
8. Number and Volume of sample containers
9. Analytical parameter and matrix of sample
10. EPA sample identification number.
11. Signature(s) off any individual(s) with control over samples.

Chain of Custody Seals

Chain of custody seals demonstrate that a sample container has not been tampered with, or opened. The individual in possession of the sample(s) must sign and date the seal, affixing it in such a manner that the container cannot be opened without breaking the seal. The chain of custody seal must be maintained from the time the sample is collected until the time the container is opened in preparation for analysis.

4.4 Soil Sampling

Collection of samples from near-surface soil will be accomplished with tools such as spades, shovels, and scoops. Surface debris will be removed to the required depth with this equipment, then a stainless steel or plastic scoop can be used to collect the sample. This method can be used in most soil types but is limited to sampling near surface areas. A stainless steel scoop, lab spoon, or plastic spoon will suffice in most other applications.

Sampling at shallow depths will be accomplished with augers and thin-walled tube samplers. This system consists of an auger, a series of extensions, a "T" handle, and a thin-wall tube sampler. The auger is used to bore a hole to desired sampling depth, and is then withdrawn. The auger tip is then replaced with a tube core sampler, lowered down the bore hole,and driven into the soil at the completion depth. The core is then withdrawn and the sample collected.

Several other types of augers are available for sampling at greater depths. These include: bucket type, continuous flight (screw), and posthole augers. Bucket types are better for direct sample recovery as they provide a large volume of sample in a short time. When continuous flight augers are used, the sample can be collected directly off the flights, which are usually at five feet intervals. The continuous flight augers are satisfactory for use when a composite of the complete soil column is desired. Posthole augers have limited utility for sample collection as they are designed to cut through fibrous, rooted, swampy soil.

4.5 Surface Water Sampling

This procedure is applicable for the collection of representative liquid samples from streams, rivers, ponds, lagoons and surface impoundments. Due to the widely diverse situations which arise when collecting surface water samples, no universal sampling procedure can be recommended for all sampling situations.

Sampling of both aqueous and non-aqueous liquids is generally accomplished through use of one of the following techniques:

Kemmerer Bottle
Bacon Bomb
Dip Sampler
Direct Collection Method

In order to collect a representative sample, the hydrology of a stream or impoundment should be determined prior to sampling. Generally, the deciding factors in the selection of a sampling device are: (1) whether the sample will be collected from shore or from a boat on the impoundment; (2) the desired sample depth; and (3) the depth and flow of a river or stream.

Samplers should be of the proper material (glass, stainless steel, etc.) for the analysis requested. A Kemmerer Bottle may be used in situations where site access is from a boat or pier and where samples at depth are required. A bacon bomb sampler may be used in similar situations as those outlined for the Kemmerer Bottle. A dip sampler may be used to recover a sample from an outfall pipe or lagoon bank where direct sample collection is limited. The long handle allows access from a discrete location. The direct method of sample collection may be used for shallow water bodies where access to the sampling location does not pose a safety concern.

4.6 Sample Handling and Shipment

Each of the sample bottles will be sealed and labeled according to the following protocol. Caps will be secured with custody seals. Bottle labels will contain all required information including sample number, time and date of collection, analysis requested, and preservative used. Sealed bottles will be placed into individual resealable plastic bags, then placed into large metal or plastic coolers, and padded with an absorbent material such as vermiculite.

Additional procedures are required for shipping hazardous waste samples including use of metal paint cans and clips, and the use of proper shipping labels. Detailed procedures can be found in the Roy F. Weston, Inc. document entitled *A Quick Guide to Shipping Hazardous Material, Issued 1988* (Weston, 1988).

All sample documents will be affixed to the underside of each cooler lid. The lid will be sealed and affixed on at least two sides with EPA custody seals so that any sign of tampering is easily visible.

"DRAFT"

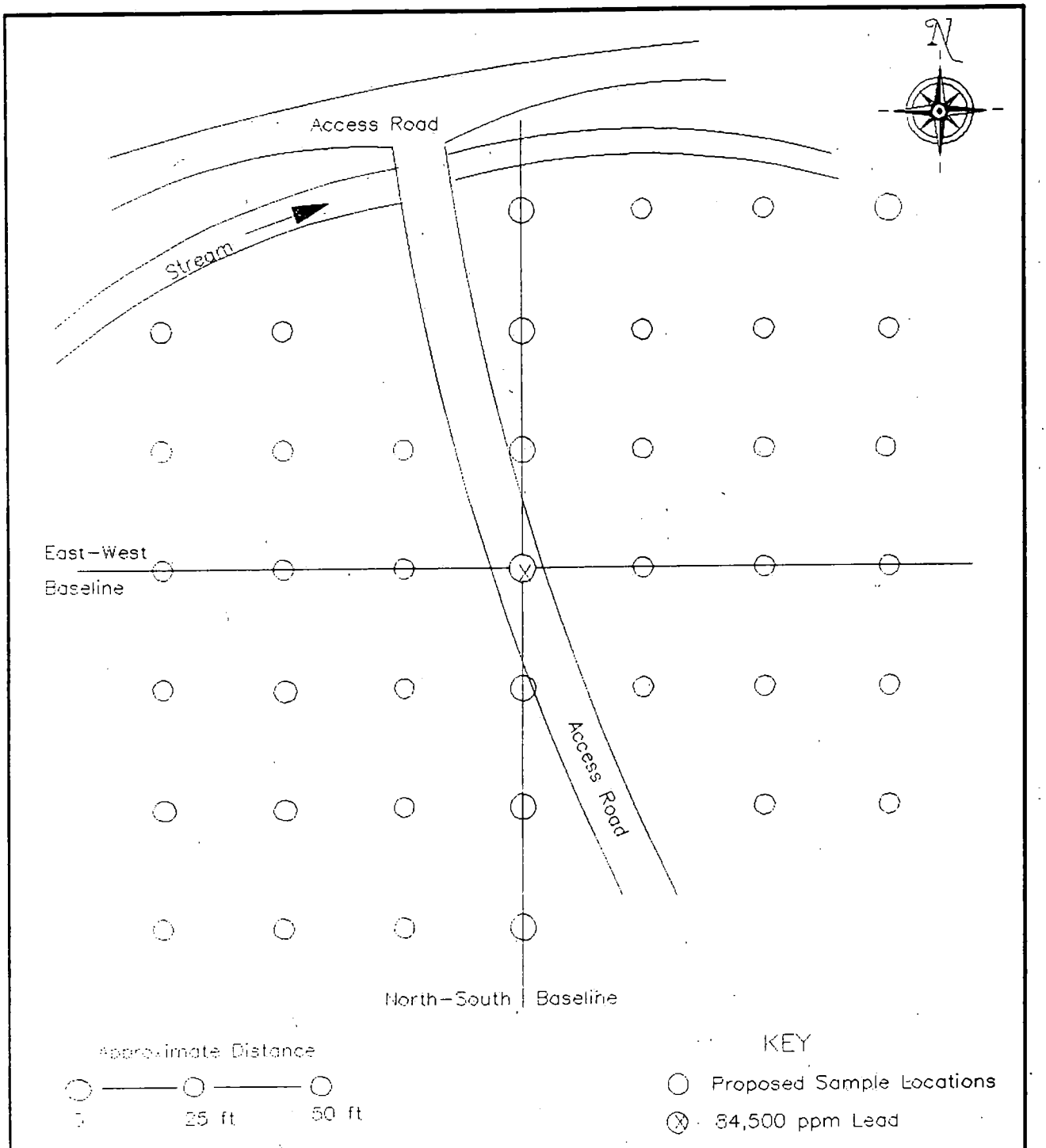

FIGURE 3
Sample Location Plan
HARCO PROPERTY
Wilton, Connecticut

Samples will be taken on a grid stretching from the September 1990 Site Investigation Sample with the highest lead concentration.

WESTON
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN	DATE	FCS #
Paul F. Killian	01/92	1638
APPROVED	DATE	TDD #
TCS	1/92	01-9201-01

4.7 Schedule of Activities

Table 1 - Proposed Schedule of Work

Activity	Start Date	End Date
Site Investigation Planning	01/02/92	01/24/92
Mobilization to the Site	01/27/92	01/28/92
Sampling Grid Setup	01/28/92	01/28/92
XMET Field Screening	01/28/92	01/29/92
XRF and ICP Sampling	01/28/92	01/29/92
Draft Report Preparation	01/30/92	02/14/92
Data Review	01/14/92	02/21/92
Final Report Preparation	02/21/92	03/07/92

The following field sampling summary table is provided to detail the specific number of samples per parameter per matrix, the number of QA samples, the required preservatives, sample holding times, appropriate sample containers and sample volume (see Table 2 - Field Sampling Summary). This table will be used to ensure that the appropriate laboratory space has been requested and to ensure that the appropriate sample containers and sample preservatives are taken to the site.

5.0 Project Organization and Responsibilities

The EPA On-Scene Coordinator, Paul Groulx, will provide overall direction to Roy F. Weston, Inc. staff concerning project sampling needs, objectives and schedule.

The Roy F. Weston, Inc. Task Leader, Paul Killian, is the primary point of contact with the EPA On-Scene Coordinator. The Task Leader is responsible for the development and completion of the sampling QA/QC plan, project team organization, and supervision of all project tasks, including reporting and deliverables.

The following sampling personnel will work on this project:

Personnel	Responsibility
Paul Groulx	EPA On-Scene Coordinator
Timothy Jones	XMET Operation/Sampling
Paul Killian	TAT Task Leader/Sampling
Zoe Horton	Sampling and Documentation

The following laboratory will be providing the following analysis:

Lab Name/Location	Lab Type	Parameters
EPA NERL 60 Westview Street Lexington, MA 02173	Environmental Services Division	Lead (XRF,ICP)

TABLE 2 - FIELD SAMPLING SUMMARY

								QC EXTRAS				
ANALYTICAL PARAMETER	LEVEL OF SENSITIVITY (1)	SAMPLE MATRIX	VOLUME	CONTAINER	PRESERVATIVE	HOLDING TIMES	SUBTOTAL SAMPLES	RINSATE BLANKS (2)	TRIP BLANKS (VOA) (3)	QC POSITIVES (4)	MATRIX SPIKES (5)	TOTAL FIELD SAMPLES
Lead (XMET)	300 ppm	Soil	10 gm	ZipLock	Ice	6 mos	~50	N/A	N/A	N/A	N/A	~50
Lead (XRF)	100 ppm	Soil	10 gm	ZipLock	Ice	6 mos	~25	1:20	N/A	N/A	N/A	~27
Lead (ICP)	1 ppm	Soil	4 oz	Glass	Ice	6 mos	7	1:20	N/A	N/A	2	10
Lead (ICP)	5 ppb	Water	1 liter	Poly	HNO3, Ice	6 mos	3	N/A	N/A	N/A	2	5

(1) - The concentration level, specific or generic, that is needed in order to make an evaluation. This level will provide the basis for determining the analytical method to be used.

(2) - Only required if dedicated sampling tools are not used. For QA2 and QA3, one blank is required per parameter per 20 samples. For QA1, enter "N/A".

(3) - For QA2 and QA3, one trip blank required per cooler used to ship VOA samples. Each trip blank consists of two 40-ml vials filled with distilled/deionized water. For QA1, enter "N/A".

(4) - Performance check samples; optional for QA2, mandatory for QA3 at one per parameter per matrix. For QA1, enter "NA".

(5) - For QA2 (optional) and QA3 (mandatory): Determine bias (% recovery) using a minimum of 2 matrix spikes. Determine precision using a minimum of 8 matrix spikes. Ensure that sufficient environmental sample is collected for lab spiking. For QA1, enter "N/A"

6.0 Quality Assurance Requirements

The on-site screening activities will employ the following QA1 objectives: sample documentation; instrument calibration/performance check; and the determination of a detection limit, if appropriate. A chain of custody record, sample cards and sample documentation will be prepared.

The laboratory analyses will be performed at NERL. The samples designated as high-level will be analyzed to indicate the presence or absence of contamination above a threshold value. High-level QA protocols will include semi-quantification of high levels of target specific compounds based on a known standard. High-level QA protocols will also include a laboratory blank. The samples designated as mid-level will be analyzed to determine definitive identification and quantification of contaminates. Mid-level QA protocols will include a laboratory blank, matrix spike and multiple standards. Samples designated as low-level are usually drinking water samples or samples collected for enforcement purposes. Low-level QA protocols will include a laboratory blank, matrix spike and matrix spike duplicate, and multiple standards.

The following table is provided to summarize the analytical parameter, sample matrix, analytical methods, required number of matrix and surrogate spike samples, reqiured detection limits and appropriate QA Objective (see Table 3 - QA/QC Analysis and Objectives Summary). This table describes the appropriate data quality indicators based on the QA/QC objective determined in Section 3.0 which will be used during the evaluation of the laboratory data package.

7.0 Deliverables

A report documenting all project activities will be generated by TAT. Based on visual observations and exact sampling locations selected in the field, a site diagram and sample location map will be prepared and included in the final sampling QA/QC plan. Any modifications to the practices in the original sampling QA/QC plan will be documented in this report when it is finalized in order to reflect what was actually done in the field.

8.0 Data Validation

A data quality review of the sample analyses will be conducted by TAT and/or NERL personnel. The data will be evaluated according to OSWER Directive 9360.4-01 (April 1990 - Interim Final).

QA1 objectives will be evaluated for calibration and detection limits.

QA2 objectives will be evaluated using the following approach:

1. Of the samples collected in the field, 10% will be confirmed for identification, precision, accuracy, and error determination. 2. The results of 10% of the samples in the analytical data packages should be evaluated for holding times, blank contamination, spike (surrogate/matrix) recovery, and detection capability. The holding times, blank contamination, and detection capability will be reviewed for the remaining samples.

TABLE 2 - FIELD SAMPLING SUMMARY

								QC EXTRAS				
ANALYTICAL PARAMETER	LEVEL OF SENSITIVITY (1)	SAMPLE MATRIX	VOLUME	CONTAINER	PRESERVATIVE	HOLDING TIMES	SUBTOTAL SAMPLES	RINSATE BLANKS (2)	TRIP BLANKS (VOA) (3)	QC POSITIVES (4)	MATRIX SPIKES (5)	TOTAL FIELD SAMPLES
Lead (XMET)	300 ppm	Soil	10 gm	ZipLock	Ice	6 mos	~50	N/A	N/A	N/A	N/A	~50
Lead (XRF)	100 ppm	Soil	10 gm	ZipLock	Ice	6 mos	~25	1:20	N/A	N/A	N/A	~27
Lead (ICP)	1 ppm	Soil	4 oz	Glass	Ice	6 mos	7	1:20	N/A	N/A	2	10
Lead (ICP)	5 ppb	Water	1 liter	Poly	HNO3, Ice	6 mos	3	N/A	N/A	N/A	2	5

(1) - The concentration level, specific or generic, that is needed in order to make an evaluation. This level will provide the basis for determining the analytical method to be used.

(2) - Only required if dedicated sampling tools are not used. For QA2 and QA3, one blank is required per parameter per 20 samples. For QA1, enter "N/A".

(3) - For QA2 and QA3, one trip blank required per cooler used to ship VOA samples. Each trip blank consists of two 40-ml vials filled with distilled/deionized water. For QA1, enter "N/A".

(4) - Performance check samples; optional for QA2, mandatory for QA3 at one per parameter per matrix. For QA1, enter "NA".

(5) - For QA2 (optional) and QA3 (mandatory): Determine bias (% recovery) using a minimum of 2 matrix spikes. Determine precision using a minimum of 8 matrix spikes. Ensure that sufficient environmental sample is collected for lab spiking. For QA1, enter "N/A"

9.0 References

Roy F. Weston, Inc., *A Quick Guide To Shipping Hazardous Materials, Issued 1988, (Updated Version of 1987)*, 1988.

Roy F. Weston, Inc., Technical Assistance Team, Region I, *Draft Inter-Office Memorandum, on Sampling Protocols,* June 6, 1991.

Roy F. Weston, Inc., Technical Assistance Team, Region I, *Removal Program Preliminary Assessment/Site Investication for Harco Property Site, Wilton, CT*, Document No. TAT 01-N-00723, November 1990.

Roy F. Weston, Inc., Technical Assistance Team, Region VI, *XMET 880 X-Ray Flouresence Operator's Manual*, James D. Hawkins, TDD # 04-9101-0030-1319, March 31, 1991.

U.S. Environmental Protection Agency, OSWER Directive 9355.4-02A (January 1990), *Supplement to Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites.*

U.S. Environmental Protection Agency, OSWER Directive 9360.4-01 (April 1990 - Interim Final), *Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan and Data Validation Procedures.*

United States Geological Survey, Bethel, Connecticut Quadrangle, 7.5 minute series (Topographical) 1971, photorevised 1984.

United States Geological Survey, Norwalk North, Connecticut and New York Quadrangle, 7.5 minute series (Topographical) 1960, photorevised 1971.

Wilton, CT Department of Environmental Health, Memo to Wilton, CT Planning and Zoning Commission, RE: G & D Construction - Harco Property Subdivision, January 20, 1986.

EPA

United States Environmental Protection Agency
Washington, DC 20460

OSWER Directive Initiation Request

1. Directive Number: 9355.4-02A

2. Originator Information

Name of Contact Person	Mail Code	Office	Telephone Code
Marlene Berg	OS-230	HSED	

3. Title

Supplement to Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites

4. Summary of Directive (include bnef statement of purpose)

Reiterates the importance of 9355.4-02 "Interim Guidance on Establishing Soil LeadCleanup Levels at SueprfundSites and states that it is a guidance and not a regulation. Guidances are not to be used as regulations.

5. Keywords

6a. Does This Directive Supersede Previous Directive(s)? ☐ No ☐ Yes What directive (number, title)

b. Does It Supplement Previous Directive(s)? ☐ No ☒ Yes What directive (number, title) 9355.4-02

7. Draft Level

☐ A – Signed by AA/DAA ☐ B – Signed by Office Director ☐ C – For Review & Comment ☐ D – In Development

8. Document to be distributed to States by Headquarters? ☑ Yes ☐ No

This Request Meets OSWER Directives System Format Standards.

9. Signature of Lead Office Directives Coordinator	Date
Betti C. VanEpps, SuperfundDocuments Coordinatyor	1/26/90
10. Name and Title of Approving Official	**Date**
Henry L. Longest & Bruce M. Diamond, Office Diretors	1/26/90

EPA Form 1315-17 (Rev. 5-87) Previous editions are obsolete.

OSWER OSWER OSWER O
DIRECTIVE DIRECTIVE DIRECTIVE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 26 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive # 9355.4-02A

MEMORANDUM

SUBJECT: Supplement to Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites

FROM: Henry L. Longest II, Director
Office of Emergency and Remedial Response

Bruce M. Diamond, Director
Office of Waste Programs Enforcement

TO: Directors, Waste Management Division, Regions I, IV, V, VII, and VIII
Director, Emergency and Remedial Response Division, Region II
Directors, Hazardous Waste Management Division, Regions III and VI
Director, Toxic Waste Management Division, Region IX
Director, Hazardous Waste Division, Region X

The purpose of this directive is to reiterate that OSWER Directive #9355.4-02, titled "Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites" and dated September 7, 1989, is a guidance document and not a regulation. As is the case with other guidance documents, this guidance should not be used as a regulation.

The lead level range provided in the directive is to be considered by a Regional Administrator in arriving at cleanup levels to be entered into Records of Decisions for individual Superfund sites. The directive is not binding in formulating individual cleanup levels.[1] The directive is clear on its face

---

[1] The "Effective Date" provision of the directive should not be read to suggest that the directive has regulatory impact. The provision simply clarifies that the directive does not require or contemplate that Agency decision makers will re-open Records of Decisions already entered into in order to consider the data provided in the directive.

that it provides only "interim guidance," that EPA is continuing to evaluate studies on the toxicity of lead, and that the guidance may be revised as additional information becomes available with respect to the bioavailability of lead in soil. Moreover, the directive plainly states that site-specific conditions and data may be taken into account in setting soil cleanup levels for individual sites, which may be above or below the levels set forth in the directive, and that the administrative record for any particular site should include site-specific information as well as background documents on the toxicology of lead.

In summary, the cleanup levels for a particular response action must be based on the entire administrative record for that response action, of which the guidance will typically be only a part.

EPA

United States Environmental Protection Agency
Washington, DC 20460

OSWER Directive Initiation Request

1. Directive Number: 9355.4-02A

2. Originator Information

Name of Contact Person	Mail Code	Office	Telephone Code
Marlene Berg	OS-230	HSED	

3. Title

Supplement to Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites

4. Summary of Directive (include brief statement of purpose)

Reiterates the importance of 9355.4-02 "Interim Guidance on Establishing Soil LeadCleanup Levels at SueprfundSites and states that it is a guidance and not a regulation. Guidances are not to be used as regulations.

5. Keywords

6a. Does This Directive Supersede Previous Directive(s)? ☐ No ☐ Yes What directive (number, title)

b. Does It Supplement Previous Directive(s)? ☐ No ☒ Yes What directive (number, title)

9355.4-02

7. Draft Level

☐ A – Signed by AA/DAA ☐ B – Signed by Office Director ☐ C – For Review & Comment ☐ D – In Development

8. Document to be distributed to States by Headquarters? ☑ Yes ☐ No

This Request Meets OSWER Directives System Format Standards.

9. Signature of Lead Office Directives Coordinator	Date
Betti C. VanEpps, SuperfundDocuments Coordinatyor	1/26/90
10. Name and Title of Approving Official	**Date**
Henry L. Longest & Bruce M. Diamond, Office Diretors	1/26/90

EPA Form 1315-17 (Rev. 5-87) Previous editions are obsolete.

OSWER OSWER OSWER O

DIRECTIVE DIRECTIVE DIRECTIVE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 26 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive # 9355.4-02A

MEMORANDUM

SUBJECT: Supplement to Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites

FROM: Henry L. Longest II, Director
Office of Emergency and Remedial Response

Bruce M. Diamond, Director
Office of Waste Programs Enforcement

TO: Directors, Waste Management Division, Regions I, IV, V, VII, and VIII
Director, Emergency and Remedial Response Division, Region II
Directors, Hazardous Waste Management Division, Regions III and VI
Director, Toxic Waste Management Division, Region IX
Director, Hazardous Waste Division, Region X

The purpose of this directive is to reiterate that OSWER Directive #9355.4-02, titled "Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites" and dated September 7, 1989, is a guidance document and not a regulation. As is the case with other guidance documents, this guidance should not be used as a regulation.

The lead level range provided in the directive is to be considered by a Regional Administrator in arriving at cleanup levels to be entered into Records of Decisions for individual Superfund sites. The directive is not binding in formulating individual cleanup levels.[1] The directive is clear on its face

---

[1] The "Effective Date" provision of the directive should not be read to suggest that the directive has regulatory impact. The provision simply clarifies that the directive does not require or contemplate that Agency decision makers will re-open Records of Decisions already entered into in order to consider the data provided in the directive.

that it provides only "interim guidance," that EPA is continuing to evaluate studies on the toxicity of lead, and that the guidance may be revised as additional information becomes available with respect to the bioavailability of lead in soil. Moreover, the directive plainly states that site-specific conditions and data may be taken into account in setting soil cleanup levels for individual sites, which may be above or below the levels set forth in the directive, and that the administrative record for any particular site should include site-specific information as well as background documents on the toxicology of lead.

In summary, the cleanup levels for a particular response action must be based on the entire administrative record for that response action, of which the guidance will typically be only a part.